

APPLICATION SPECIFIC TRAFFIC OPTIMIZATION IN A WIRELESS LINK

ABSTRACT OF THE DISCLOSURE

A packet data system such as a TCP/IP network transmits packets containing a variety of data types along links in the network. Packets are transmitted in a stream
5 between nodes interconnected by the links, which conform to a transport layer protocol such as TCP, UDP, and RSTP, and include wireless links, which transmit packets using a radio frequency (RF) medium. Typical protocols, however, are usually developed to optimize throughput and minimize data error and loss over wired links, and do not lend themselves well to a wireless link. By examining the data in a packet, performance
10 characteristics such as a port number are determined. The performance characteristics indicate the application type, and therefore, the data type, of the packets carried on the connection. Since certain data types, such as streaming audio and video, are more loss tolerant, determination of the data type is used to compute link control parameters for the wireless link that are optimal to the type of data being transmitted over the link.